PROCEEDINGS

OF THE

ZOOLOGICAL SOCIETY OF LONDON.

January 13, 1857.

Dr. Gray, F.R.S., in the Chair.

The following papers were read :---

1. Notes on the Birds in the Museum of the Academy of Natural Sciences of Philadelphia, and other Collections in the United States of America.

BY PHILIP LUTLEY SCLATER, M.A., F.Z.S., ETC.

Having recently returned from a few months' excursion to the United States of America, and had the advantage of a personal inspection of the principal zoological collections in the northern portion of the New World, I think it may interest the Society to give them some account of the state of Ornithology in that country (that being the branch of Zoology to which I paid most attention), and to communicate some notes on new or rare specimens of Birds which thus came under my observation.

The collection of the Academy of Natural Sciences of Philadelphia is certainly the best zoological collection in the New World, and in the particular department of Ornithology, and perhaps one or two other points, is probably superior to every Museum in Europe, and therefore the most perfect in existence. In 1852, when Dr. Ruschenberger wrote his notice on the origin, progress, and condition of the Academy, the number of specimens of birds was estimated to exceed 27,000, and since that time large additions have been made, and the number has been very considerably increased. Dr. Thomas B. Wilson is, as is well known, the person to whose munificence the Academy is indebted for the greater part of the specimens which make up this magnificent series. The general collection formed by

No. CCCXXVII.—PROCEEDINGS OF THE ZOOLOGICAL SOCIETY.

Prince Massena d'Essling, Duc de Rivoli, and the types of the species described by Mr. Gould in the 'Birds of Australia,' were the first and largest of Dr. Wilson's contributions towards this result; but a great number of further additions have been received during the last ten years from the same individual, and no opportunity is neglected of rendering this branch of the Academy's collection still more perfect. As the Library of the Academy is also very complete, particularly in all that relates to Ornithology, and the greatest liberality is shown to strangers who desire access to any part of the collections, it will be evident that there are few, if any, places in the globe where a student of Ornithology can pursue his researches with more convenience and profit to himself than the Academy of Natural Sciences of Philadelphia. Mr. John Cassin, so well known by his work on the Birds of California and Oregon, and his numerous papers in the Proceedings of the Academy, devotes the whole of his leisure time towards the cataloguing and arrangement of the collection of birds, and has already published Lists of the *Raptores*, and of the Caprimulgidæ and Hirundinidæ of the order Passeres. The collection of birds' eggs belonging to the Academy (of which Dr. Heerman published a catalogue in 1853) is likewise one of the most extensive in the world, embracing upwards of 1320 determined species.

Mr. Cassin has also a private collection of his own at Philadelphia, and is no less active in obtaining specimens in the field than in his studies of the examples contained in the Museum of the Academy.

At New York the Lyceum of Natural History have at present no collection, but publish, in their 'Annals,' many interesting papers on Ornithology, chiefly from the pen of Mr. George N. Lawrence. This gentleman is very well acquainted with the birds of the northern portion of the American continent, and possesses an extensive ornithological collection, embracing many species which he has himself described as new.

The types of the birds described by De Kay in the 'Natural History of the State of New York' are at Albany, and form part of the interesting collection which was the result of the State-survey, and so excellently illustrates the zoology of that region.

In Boston there is, as is well known, a flourishing Natural History Society, whose Museum contains a good collection of birds, principally American. Dr. Thomas Brewer, one of its members, has a very extensive cabinet of eggs, and is now about to publish, under the patronage of the Smithsonian Institution, a large work with coloured plates illustrating the eggs of all the species of North American birds—the first work of the kind undertaken in that country. Another member of the Society—Dr. Samuel Cabot—has also a collection of birds, containing, amongst others, the types of the species described by him in the Proceedings and Journal of the Society in 1843, and which he himself procured in Yucatan.

There are two collections of Natural History at Washington, which merit much attention. First, that in the Patent Office, where will be found the specimens collected during the celebrated Exploring Expedition of Commander Wilkes, and some other of the Government expeditions: and, in the second place, the very extensive series of birds in the possession of the Smithsonian Institution, which body now takes in charge the specimens of Natural History collected by the more recent Government expeditions, as well as a large mass of material received from its own numerous correspondents. The United States Boundary Commission, and the six separate expeditions for the survey of the railway route to the Pacific, have lately accumulated a very large series of specimens of birds from the western portion of the continent in the hands of the Institution ; and the publication of the Zoology of these expeditions (which Professor Baird, Mr. Cassin, and other Naturalists are now engaged upon) will make very large additions to our knowledge of North American Ornithology.

Professor Baird's private collection of birds is also very complete, and contains many of Audubon's rarer types.

The College of Charleston in South Carolina possesses an interesting collection of Natural History. The birds are principally North American, but there are several rare species from Cuba, presented to the College by Señor F. A. Sauvalle of Havana.

The following are some of the notes which I took during my inspection of the collections above mentioned, before presenting which I may be permitted to observe, that nothing can be more gratifying than the liberal access and great facilities in every case afforded to the stranger visiting the Collections and Libraries both public and private in the United States of America.

ACCIPITRES.

The American Vultures forming the genus Cathartes require further investigation before the number of the species can be satisfactorily determined. Most modern writers now agree in separating the southern red-headed and black-headed species from their northern representatives of the United States, Cathartes aura and C. atratus. Prince Bonaparte first remarked upon these differences in his paper on this subject in the Comptes Rendus for 1850, p. 292. But here, as also in his 'Conspectus,' he considers C. burrovianus, of Cassin, the same as the southern C. iota. This is, in my opinion, certainly not the case. There are two specimens of Mr. Cassin's bird in the Academy's collection from Mexico, and they most nearly resemble the true aura of the States, but are at once distinguishable by their diminutive size, and seem to be truly distinct from both the other two red-headed species.

Amongst the rarer types in the large series of Falconidæ possessed by the Academy, is the only hitherto known specimen of *Cymindis Wilsoni*, Cassin (Journ. Ac. Phil. i. p. 21. pl. 7). This singular bird is certainly quite different from *Cymindis uncinata*, with which Dr. Cabanis seems inclined to unite it (vide Journ. f. Orn. 1854, Extra-h. p. lxxx); and I have lately been informed that Dr. Gundlach, who is still prosecuting his researches into the rich ornithology of the island of Cuba, has recently succeeded in obtaining other specimens.

The little Californian Athene or Glaucidium, which Cassin has considered to be Temminck's Strix infuscata (Birds of Cal. & Oreg. p. 189), and was called by Audubon Strix passerinoides, appears to be clearly different from the South American bird, which is legitimately entitled to bear both of these names. It seems most like the European passering, but has the toes only partially covered with hairs. Unless Wagler's Glaucidium gnoma can be reconciled with it, of which there appears to be much doubt, it will require a new name; and I should therefore venture to suggest that it be called Glaucidium californicum.

The Library of the Philadelphian Academy contains a copy of the rare work called 'Registro trimestre,' published in Mexico in 1832, and of which some particulars are given by Mr. Cassin in his 'Birds of California' (p. 24). Señor De la Llave's generic appellation of Pharomacrus for the group of Trogons called Calurus by Mr. Gould, occurs here in an article entitled "Sobre el Quetzaltolotl, genero nuevo de aves," and is decidedly entitled to adoption. Ar. however, De la Llave's specific name "mocinno" (intended to immortalize an illustrious Mexican of that name) is rather unpleasing, I trust that the term *paradiseus* may have been previously applied to it by Prince Bonaparte. The Prince assigns the date of 1826 to the publication of this name in his ' Conspectus,' but gives no reference, and I cannot find out where this name was first employed. In the second volume of the same work, Señor De la Llave describes four new Humming-Birds under the curious specific titles xicotencal, tzacatl, papantzin and topiltzin !!

Two specimens of the bird which I described in these Proceedings under the name of *Cyphorinus albigularis* are in the collection of the Philadelphian Academy. They were obtained at Panama by Mr. Bell. I found them marked, to my surprise, *Thryothorus fasciato-ventris*, Lafr. (R. Z. 1845, p. 337), and such is indeed the case. My specific name must therefore give place, and the species *Thryothorus fasciato-ventris* should be elided from the list of Bogota Birds, in which, on Lafresnaye's authority, I have hitherto included it. The same collection also contains an example of the beautiful *Vireolanius icterophrys*, Bp. (P. Z. S. 1855, pl. ciii.).

Besides the three little Thrushes (which have been so much confounded together, and have received so many names), called in Bonaparte's 'Conspectus,' *Turdus solitarius, T. minor* and *T. wilsoni*, Audubon's *Turdus nanus* appears to me to be also a valid species. It most nearly resembles *T. solitarius*, of which it is the western representative, but is smaller in size, and has a more densely spotted throat and breast. I cannot understand the reasons that have induced Prince Bonaparte to banish *Turdus nævius*, of which I saw many examples in the American collections, from the family of Thrushes, and to place it among the *Tæniopterines*. I cannot at all agree with him on this point. Mr. Bell, who has observed this bird in a state of nature, tells me that its habits are nearly those of the American Robin (*Turdus migratorius*), and I am inclined to consider that bird as its nearest ally.

The Philadelphian collection contains the only adult male I have seen of the beautiful Flycatcher named Muscicapa rugensis by Hombron and Jacquinot (Ann. d. Sc. Nat. xvi. p. 312). M. Pucheran, led away by the strong compressed beak, which is truly remarkable in this family, has placed this bird in the genus Colluricincla. But an attentive examination of its structure shows, without doubt, that it is a Muscicapine, though with abnormal characters pushed to the extreme of divergence. I think, however, it may safely be placed in the neighbourhood of Pomarea nigra, with which it corresponds in its changes of plumage. Prince Bonaparte has proposed for it the separate generic name Metabolus.

The Smithsonian Institution possesses examples of Pachyrham-phus aglaix (v. P. Z. S. 1856, p. 297), collected by Mr. Couch in the province of New Leon, Mexico. This is the farthest northern appearance of a bird of this family hitherto recorded.

Mr. Lawrence of New York, amongst many other very interesting birds in his collection, showed me the first example I had seen of Audubon's Alauda spraguii. This has always been rather a puzzling bird to me, as the New World is commonly supposed to be devoid of true Larks-although one would have thought the immense grassy prairies of the Northern Continent to be a region perfectly adapted to the members of this group of animals-and their place is occupied by the modified Starling-like form Sturnella. Prince Bonaparte has located this curious bird in the genus Otocorys; Professor Baird has called it an Agrodroma. But an examination of the specimen which I now exhibit, and which has been kindly lent to me by Mr. Lawrence, at once shows that its true place is not in either of these genera. Though rather tenuirostral, it must, I think, be placed within the *Alaudidæ* (and not with the Pipits) near *Calan*drella and Otocorys, with which forms it agrees in the absence of the first spurious quill, and I venture to propose for it the distinct generic title Neocorus.

Mr. John Bell of New York gave me a most interesting account of the discovery of this bird, which was made by Mr. Audubon's party on the Upper Missouri in the neighbourhood of Fort Union, at the junction of the Yellowstone and Missouri rivers. Here it is abundant, though not easy to obtain, being only noticeable when soaring high in the skies like our Sky-Lark, and pouring forth its long-continued song.

The Smithsonian Institution and Philadelphian Collection both contain examples of *Myiadestes Townsendi*, which I found, as I had anticipated, to be truly different from the bird which I characterized in these Proceedings last year under the name of *M. uni*color (v. P. Z. S. 1856, p. 299), and still more so from Lafresnaye's *M. obscurus*, to which Prince Bonaparte and Cabanis have united it. Another species of this peculiar form, which I first saw in Mr. Lawrence's collection, is *M. elisabethæ* from Cuba (*Muscicapa elisabethæ*, Lembeye, Av. de Cuba, pl. 5. fig. 3). These, with *M. armillata*, from Jamaica, *M. griseiventris* from Peru, and my *M. venezuelensis*, make a total of seven typical species of this singular group now known, and afford a beautiful example of the regular diffusion of corresponding ornithic species over distinct though neighbouring geographic areas. The Philadelphian Collection likewise contains an example of *Cichlopsis leucogonys*, Cab., belonging to the same family of birds, the type of which in the Berlin Museum has been hitherto considered as unique.

Among the Tanagers in the Philadelphian Academy I discovered two specimens of a very distinct species of *Saltator*, which I have never seen in European collections, and which I described in the Proceedings of the Academy under the name of *S. atripennis*. Dr. Cabot of Boston also showed me the type of his *Pyranga roseogularis*, which is apparently a good species. These two Tanagers must be added to those given in my Synopsis of the birds of that family published in these Proceedings last year.

On examining the type of Mr. Cassin's *Pastor nigrocinctus* (Pr. Ac. Sc. Phil. v. p. 68), I found it to be the same as the bird in the Paris Museum named *Sericulus anais* by Lesson, R. Z. 1839, p. 441, and which has rightly been raised to generic rank by Prince Bonaparte under the name *Melanopyrrhus anais* (Notes Orn. p. 9). The existence of a second example of this bird is very interesting, as it removes all doubts about its being a real and not a fictitious bird, as Mr. G. R. Gray hints in his 'List of Genera and Subgenera.'

The same collection is also fortunate in possessing amongst its *complete* series of *Paradiseidæ*, the only known specimen of the splendid second species of the genus *Diphyllodes*. American Naturalists were quite unaware when they named this bird that Prince Bonaparte's characters of his *Lophorina* (!) *respublica* (Compt. Rend. 1850, p. 131) were taken from the self-same example. And seeing that even after the correction of the error in the generic appellation (Compt. Rend. 1850, p. 291), the descriptive phrase given by the Prince is positively erroneous, and such as the bird cannot by any possibility be recognized by, I must say I think it very questionable whether we ought not to employ Cassin's name *Wilsoni* for this species, although certainly subsequent in time of publication to Prince Bonaparte's term *respublica*.

The Philadelphian Collection also possesses the only known example of *Paradigalla carunculata*, described and figured by Eydoux and Soulevet in the 'Voyage of the Venus.'

Icterus Scottii, Couch, Pr. Ac. Sc. Phil. vii. p. 66, discovered by Lieut. Couch in New Leon and Coahuila, Mexico, is the same as Icterus parisorum, Bp.

There have been two species of this family long confounded under the name dominicensis. The true I. dominicensis (Pendulinus flavigaster, Vieill.) is from Cuba and S. Domingo, and is the bird characterized under the name Pendulinus hypomelas in Bp.'s Consp. p. 433. sp. 8. On the other hand, his P. dominicensis is quite a different bird, which I propose for the future to call ICTERUS WAGLERI.

Psarocolius flavigaster, Wagl. Isis, 1829, p. 756, nec Vieill. Pendulinus dominicensis, Bp. Consp. p. 432, nec Linn.

Nigro-sericeus : tectricibus alarum minoribus infra et supra, dorso postico et abdomine toto flavis, hoc aurantiaco tincto : tectricibus caudæ inferioribus nigris.

Long. tota 8.0, alæ 4.2, caudæ 3.7.

There are examples of this bird at the Smithsonian Institution collected by Lieut. Couch in Coahuila. I have likewise examples of it in my own collection. *Icterus prosthemelas*, Strickland (Contr. Orn. 1850, p. 120. pl. 52) (which is not the same as *Pendulinus lessoni*, Bp.), is a closely allied species, but is smaller and has the under tail-coverts yellow.

Emberiza belli, Cassin (Pr. Ac. Sc. Phil. 1850, pl. 4. p. 104), and Emberiza bilineata (ibid. pl. 3) seem to me to form natural members of the genus Poospiza, and I propose to call them Poospiza belli and Poospiza bilineata.

Junco cinereus has recently been described as new for the third time as Struthus caniceps (Woodhouse in Pr. Ac. Sc. Phil. vi. p. 202). As I have already observed, the name Junco ought to be employed instead of Struthus for all the three closely allied species of this genus, which will henceforth stand as J. cinereus, J. oregonus, and J. hyemalis.

Zonotrichia gambelli (the third species of Bp.'s Consp.) is now considered in America as the young of Z. leucophrys: Z. mortoni (the fifth species), of which I have seen the type in the Philadelphian collection, is nothing more than a Chilian specimen of Z. pileata sive matutina: Z. querula (the ninth species) is the same as (the tenth) Z. comata, and ought rather to be placed in the genus Passerella.

Struthus atrimentalis, Couch (Pr. Ac. Sc. Phil. vii. p. 68), seems to be the same as *Spinites atrigularis* (Cab. Mus. Hein. p. 133), though M. Cabanis' phrase is not very perfect.

The beautiful Zonotrichia cassinii lately described by Woodhouse (Pr. Ac. Sc. Phil. vi. p. 60) is very closely allied to Peucæa bachmanni, and must be placed next to it.

Dr. Gambel's *Fringilla blandingiana* (Journ. Ac. Phil. i. pl. 9) is the same as *Pipilo rufipileus*, Lafr. It is not an *Embernagra*, as arranged by Bonaparte, nor a *Pipilo*, and, as divisions are made now-a-days, ought probably to have a distinct generic appellation.

Chondestes ruficauda, Bp. Notes Orn. p. 18, of which I found several specimens in the collection at Philadelphia, is a typical Aimophila, and Embernagra pyrgitoides, Lafr., seems to be nothing more than A. rufescens, the second species of that same genus.

The Philadelphian Collection has likewise specimens of *Chryso*mitris yarrelli (Aud.), not however from Western America, but from the Orinoco; and I believe Audubon was altogether in error as to its locality, and that it is an inhabitant, not of the northern, but of the southern portion of the American continent. The recent researches have increased the number of Woodpeckers of the genus *Centurus* occurring within the limits of the United States to three in number :—(1) *C. carolinus*, of the Eastern States; (2) *C.uropygialis*, Baird, lately discovered by the Naturalists attached to Lieut. Whipple's expedition in New Mexico; and (3) *C. flaviventris*, Sw., which seems to be by no means uncommon in Texas, and is apparently quite distinct from *C. santaeruzi*, Bp., with which it is often considered synonymous.

There is a very fine series of specimens of the genus *Coua* in the Philadelphian collection representing every species mentioned in Prince Bonaparte's 'Conspectus,' except *C. madagascariensis. Coua ruficeps* is by no means the same as *C. reynaudi*, as is there made out, but is a species more like *C. cristata* with a white throat and violaceous breast from Zanzibar, while *C. reynaudi* is from Madagascar.

Certain European Naturalists appear to me to have been much too hasty in condemning the new Grus hoyiana lately described by Mr. Dudley in the 'Proceedings of the Philadelphian Academy.' Judging from the examples in the collection of that Institution, I venture to pronounce it an excellent species, and not the young of Grus americana, as Dr. Hartlaub has endeavoured to prove (Journ. f. Orn. 1855, p. 336). It would seem, however, that this bird is really a Western species from Oregon and Washington territory, and only accidentally present in Wisconsin, where it was first met with by Mr. Dudley.

2. ON THE STRUCTURE OF THE PELVIS OF CHLAMYPHORUS TRUNCATUS. BY DR. J. E. GRAY, F.R.S., V.P. ENT. Soc., ETC.

Sir Woodbine Parish having, after considerable trouble, at length been able to procure a second specimen of this extraordinary and most interesting animal, has kindly transmitted it to the British Museum.

The specimen had been eviscerated and simply dried in the sun, was destitute of any fur, and did not afford any means of distinguishing its sex.

The Museum already possessed the well-preserved specimen formerly procured by Sir Woodbine Parish, and the imperfect skeleton of it so well described and figured by my late excellent friend Mr. Yarrell in the Zoological Journal, vol. iii. p. 544. t. 16.

In the specimen of the skeleton figured and described by Mr. Yarrell, the bones of the pelvis were separated to preserve the outer covering entire; the "bones being cut through as near to and as parallel with the inner surface of the plates as their confined situation would admit," p. 546.

This description did not in the least prepare me for the extraordinary structure which was discovered when the flesh was removed.

The truncated posterior disk or shield is firmly attached to the